

*Appln no. 10/668,753  
Amendment dated Nov. 24, 2004  
Response to final Office Action of Sept. 24, 2004*

### **REMARKS**

Applicants have amended claims 23-25 and canceled claim 9. Claims 1-8, 10-29 and 31-34 are pending. Reconsideration of this application, as amended, is requested.

#### **Section 112 Rejections**

Claims 8, 23-29 and 31-32 were rejected under 35 U.S.C. 112, second paragraph. Applicants believe that "claim 8" was intended to be "claim 9".

Claim 9 has been canceled, rendering this rejection moot. Claims 23-25 have been amended to clarify that the binder precursor and the binder have the plurality of ceramic abrasive particles therein.

Applicants request withdrawal of this rejection.

#### **Section 103 Rejections**

Claims 1-29 and 31-34 were rejected under 35 U.S.C. 103(a) as unpatentable over Hoopman et al ('248) in view of Abrahamson. Claims 1-29 and 31-34 were also rejected under 35 U.S.C. 103(a) as unpatentable over Hoopman et al ('178) in view of Abrahamson. Applicants continue to disagree with these rejections.

Applicant does not disagree that both Hoopman '248 and Hoopman '217 are directed to abrasive articles having abrasive composites that comprise abrasive particles in a radiation curable binder. The disclosure of the references was discussed in Applicants' previous paper.

As discussed previously, the '248 and '217 patents provide abrasive articles that provide both high cut rate and fine finish. The objectives of the '248 and '217 patents are to obtain a relatively high rate of cut while concomitantly impart a relatively fine surface finish on the workpiece being abraded. Applicants of this application do not dispute that the '248 and '217 patents obtained that objective.

The current application, however, goes farther than the '248 and '217 patents, in that the current Applicants have obtained an abrasive article that does not experience the usual decrease in cut rate performance over time, as is seen in the '248 and '217 patents, and thus resulting in a greater total cut. It is the combination of the large (i.e., at least 85 micrometer) ceramic abrasive particles in a large topography (i.e., at least 500 micrometers) that provides improved cut

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performance over time. Such is recited in the pending claims. The performance is specifically called out in the independent claims in the various "wherein" clauses.

As acknowledged previously and reiterated by the Office Action, both the '248 and '217 patents disclose a wide variety and range of composite sizes and abrasive particle sizes and types. These patents, however, do not recognize the benefits that are obtained with the specific combination recited by the pending claims. Additionally, neither the '248 patent nor the '217 patent recognizes the performance obtained using the specific combination of features.

Applicants' contend that these claims are distinguishable and patentable over the '248 and '217 patents. Abrahamson does not remedy the missing teaching of the '248 and '217 patents, that of the improved performance results obtained with the specific element combination. Abrahamson teaches that rare earth oxide modified ceramic abrasive particles can be used in abrasive composites.

Applicants contend that the claims, as amended, are patentable, and request withdrawal of the rejections.

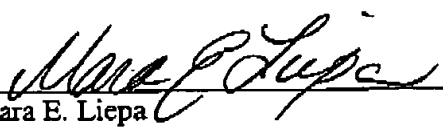
#### Summary

In view of the above amendments and remarks, Applicants respectfully request a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone Applicants' attorney Rick L. Franzen, Reg. No. 51,702, at 651.736.6432.

Respectfully submitted,

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